



# EARTH SCIENCE APPLICATIONS WEEK 2021

August 9 – 12, 2021

The Applied Sciences team invites you to NASA's Earth Science Applications Week! Learn how data driven Earth observations are used to help make our world a better place!

## WEEK AT A GLANCE

**MON AUG 9 – 12:00PM – 3:00PM EDT**

Opening Plenary

Application User Panel

AppSci Community Social

**TUES AUG 10 – 12:00PM – 4:15PM EDT**

Strengthening Ecosystems

Boosting Disaster Readiness

Afternoon Symposium

**WED AUG 11 – 12:00PM – 4:15PM EDT**

Enhancing Water Mgmt.

Ensuring Food Security

Afternoon Symposium

**THUR AUG 12 – 12:00PM – 3:00PM EDT**

Promoting Health & AQ

Closing Plenary

DEVELOP Community Social

To register and for more information, visit:

<https://appliedsciences.nasa.gov/appsciweek>

# MONDAY AUGUST 9<sup>th</sup>



## PLENARY SESSIONS – 12:00PM to 2:00PM EDT

### Opening Plenary

- 12:00PM Welcome & Logistics (Emcee: Katie Lange)
- 12:05PM Opening Remarks (Lawrence Friedl)
- 12:15PM NASA Earth Science Division Perspectives (Karen St Germain)
- 12:20PM NASA Applied Sciences Introduction (Emily Sylak-Glassman)
- 12:30PM Applied Sciences History (Teresa Purello & Monica Namo)
- 12:35PM NASA Research & Analysis Coastal Applications (Laura Lorenzoni)
- 12:45PM NASA Climate Applications (Gavin Schmidt)
- 12:55PM Week Outlook & User Panel Introduction (Katie Lange)

### Earth Observations User Panel

- 1:00PM Moderator: Nicole Ramberg-Pihl
  - Sidney Novoa, Program Manager, Amazon Conservation
  - Nikki Tulley, Hydrology PhD Candidate, Navajo Nation
  - Tanner Yess, Co-Executive Director, Groundwork Ohio River Valley
- 2:00PM Adjourn

## APPLICATIONS COMMUNITY SOCIAL

2:00PM to 3:00PM EDT

Join the Applied Sciences Team and broader applications community in a fun networking social!

[JOIN HERE](#)

For the most up-to-date information, visit:

<https://appliedsciences.nasa.gov/appsciweek>



## PLENARY SESSIONS – 12:00PM to 2:00PM EDT

12:00PM Welcome & Logistics (Emcees: Erica Kriner & Rochelle Williams)  
Opening Remarks (Sandra Cauffman)

### Strengthening Ecosystems

12:05PM NASA Ecological Forecasting Program Overview (Keith Gaddis)  
12:10PM Mongolia Project (Becky Chaplin Kramer)  
12:20PM Coral Reef Project (Megan Donahue)  
12:30PM Colorado Eco Forecasting Project (Alix Bakke)  
12:40PM Land Use Land Cover in Amazonia (Stephanie Spera)  
12:50PM Eco Forecasting End User Montage Video (Keith Gaddis)

### Boosting Disaster Readiness

1:00PM NASA Disasters Program Overview (David Green)  
1:10PM Hail Storms (Kris Bedka)  
1:16PM Landslides (Robert Emberson)  
1:23PM Tsunamis (Brendan Crowell)  
1:29PM Oil Spills (Ellen Ramirez)  
1:35PM Critical Infrastructure (Charlie Huyck)  
1:41PM AmeriGEO Initiative Disasters (Ricardo Quiroga)  
1:47PM Geospatial Mapping Portal (Jeremy Kirkendall)  
1:53PM Illinois Disasters Project (Kyle Pecsok)  
2:00PM Adjourn

## AFTERNOON SYMPOSIUM – 2:15PM to 4:15PM EDT

Join us for the afternoon symposium! Two concurrent tracks will offer attendees an opportunity to learn from and engage directly with the Applied Sciences Team. Flip to the next page for the agenda and connection links.

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# TUESDAY AUGUST 10<sup>th</sup>



## AFTERNOON SYMPOSIUM – 2:15PM to 4:15PM

Join us for the afternoon symposium! Two concurrent tracks will offer attendees an opportunity to learn from and engage directly with the Applied Sciences Team.

### INNOVATION & PROFESSIONAL DEVELOPMENT

- 2:15PM **Career Panel**  
*Moderator:* Cecil Byles  
*Panelists:* Kristin O'Shea, Marc Courdert, Zachary Leslie, & Dave Hondula
- 3:15PM **Prizes & Challenges to Advance Innovation in Earth Science Applied Sciences**  
*Presenters:* Shobhana Gupta, Emily Gelbart, Trista Brophy, & Sativa Cruz
- 3:45PM **NASA Capacity Building Program's EO Summer Camp**  
*Presenters:* Ella Haugen, Monica Namu, & Hannah Wetzel
- 4:00PM **NASA DEVELOP's Software Carpentry**  
*Presenters:* Britnay Beaudry, Scott Cunningham, Hayley Pippin & Alexa Lopez

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### EARTH OBSERVATION APPLICATIONS

- 2:15PM **Flash Talks**  
Southern Bhutan Eco III (Thinley Wangden & Kezang Tshering)  
Mapping Tree Crop Plantations in Ghana (Jacob Abramowitz)  
Assateague Island Eco (Porter Abbey & Jay Mrazek)  
Fire Dynamics Near Indigenous Territories and Protected Areas in Brazil (Katie Walker)  
Delaware Eco (McKenna Brahler & Jacob Frankel)  
Bias Correction of Global Streamflow Product Using Machine Learning (Biplov Bhandari)
- 2:55PM **NASA ARSET Overview**  
*Presenter:* Jonathan O'Brien
- 3:10PM **NASA POWER Overview**  
*Presenters:* Paul Stackhouse, Bradley Macpherson, & Madison Broddle
- 3:45PM **Flash Talks**  
Peru Health & AQ (Nelson Huffaker)  
Fairfax County Urban Development (Caden O'Connell )  
Cincinnati & Covington Urban Development II (Paxton LaJoie & Sophie Webster)

[JOIN TRACK 2](#)





# WEDNESDAY AUGUST 11<sup>th</sup>

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## PLENARY SESSIONS – 12:00PM to 2:00PM EDT

12:00PM Welcome & Logistics (Emcees: Britnay Beaudry & Hayley Pippin)  
Opening Remarks (Nancy D. Searby)

### Enhancing Water Management

12:05PM Leveraging Data & Tools to Develop New Capabilities (John Bolten)  
12:15PM Missions & Apps for Water Resources Management (Christine Lee)  
12:20PM Fostering Partnerships through Needs Assessments (Stephanie Granger)  
12:25PM Modeling & Remote Sensing to Study the Water Cycle (Venkat Lakshmi)  
12:30PM Co-production of Tools in Navajoland (Amber McCullum)  
12:35PM Panel Discussion  
12:45PM Strengthening Resilience to Drought (Amber Jenkins)  
12:50PM Jobs Bay Water Resources Project (Liliana Hernandez Gonzales)

### Ensuring Food Security

1:00PM NASA Agriculture Program History & Overview (Brad Doorn)  
1:05PM NASA Harvest Activities & Impacts (Inbal Becker-Reshef)  
1:15PM SAR for Derecho Damage Assessments in Iowa (Mehdi Hosseini)  
1:20PM NASA Harvest Africa Initiatives (Catherine Nakalembe)  
1:30PM Live Demo: NASA Harvest's GLAM 2.0 (John Keniston)  
1:45PM Midwest Agriculture Project (Joel McClure)  
1:55PM Closing Remarks (Brad Doorn)  
2:00PM Adjourn

## AFTERNOON SYMPOSIUM – 2:15PM to 4:15PM EDT

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# WEDNESDAY AUGUST 11<sup>th</sup>

AFTERNOON SYMPOSIUM – 2:15PM to 4:15PM

Join us for the afternoon symposium! Two concurrent tracks will offer attendees an opportunity to learn from and engage directly with the Applied Sciences Team.

## SERVICE PLANNING & VALUATION

2:15PM **SERVIR Service Planning Toolkit**  
*Presenters:* Emily Adams, Laura Cooper, Jose Fernandez, Georgia Hartman, Ekapol Sirichaovanichkarn, Allison Nguyen, Amanda Weigel

3:15PM **NASA VALUABLES**  
*Presenters:* Yusuke Kuwayama & Bethany Mabee

[JOIN TRACK 1](#)

## EARTH OBSERVATION APPLICATIONS

2:15PM **Flash Talks**  
Powder River Basin Water (Catherine Buczek & Karissa Courtney)  
Southwest Water (Rebecca Bernat & Michael Corley)  
Bhutan Water III (Yeshey Seldon)  
Coastal California Water II (Rachel Darling, Alex Gunnerson, & Sophia Stonebrook)  
Highland Lakes Water (Addison Pletcher)  
Maya Forest Water (Tamara Rudic & Madelyn Savan)  
Louisiana Water (Daniel Babin)  
CEOS Google Colab (Ila White & Philip Casey)

3:30PM **NASA Capacity Building Program StoryMap**  
*Presenters:* Arlin Arpero, Teresa Purello & Shilpa Kannan

3:45PM **Flash Talks**  
Florida Transportation & Infrastructure (Michael Enz)  
Tonle Sap Ag II (Justine Spore)  
Argentina Ag (Ryan Lam & Tyler Pantle )  
Estimating Forest Stand Height in Savannahket, Lao PDR Using InSAR and Backscatter Methods with I-Band SAR Data (Helen Parache)

[JOIN TRACK 2](#)

# THURSDAY AUGUST 12<sup>th</sup>



## PLENARY SESSIONS – 12:00PM to 2:00PM EDT

12:00PM Welcome & Logistics (Emcees: Ryan Hammock & Adriana Le Compte)  
Opening Remarks (Lawrence Friedl)

### Promoting Health & Air Quality

12:05PM NASA Health & Air Quality Program Overview (John Haynes)  
12:10PM Health & AQ Flash Talk (Assaf Anyamba)  
12:18PM Health & AQ Flash Talk (Julia Gohlke)  
12:26PM Yonkers Urban Development (Oded Holzinger & Jillian Walechka)  
12:34PM Thailand Air Quality Monitoring (Pawan Gupta)  
12:42PM HAQAST Overview & Video (Tracey Holloway)  
12:57PM Closing Remarks (John Haynes)

### Closing Plenary

1:00PM Week in Review (Emily Sylak-Glassman)  
1:10PM SMD Remarks & Reflections (Thomas Zurbuchen)  
1:20PM Data Pathfinders (Cyndi Hall)  
1:30PM Space Apps Challenge (Sarah Hemmings)  
1:40PM Applications Guidebook (Erin Martin & Sterling Riber)  
1:50PM Applied Sciences Reflections (Lawrence Friedl)  
2:00PM Adjourn

## DEVELOP COMMUNITY SOCIAL – 2:00PM to 3:00PM EDT

Join the DEVELOP community of former and current participants, Center Leads, Fellows, Senior Fellows, Advisors, Partners, and Friends for a networking social!

[JOIN HERE](#)

For the most up-to-date information, visit:

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# EARTH SCIENCE APPLICATIONS WEEK 2021

August 9 – 12, 2021

For more information about the platforms we are using, see below:

## PLATFORM INFORMATION

**Plenary Sessions:** Zoom for Government (more information:  
<https://www.zoomgov.com/>)

**Afternoon Symposia:** Microsoft Teams (more information:  
<https://www.microsoft.com/en-us/microsoft-teams/group-chat-software>)

**Social Events:** Wonder (more information:  
<https://www.wonder.me/>)

Note: You will NOT need to download any apps to join, you will be able to join in your browser for all activities.

To register and for more information, visit:  
<https://appliedsciences.nasa.gov/appsciweek>